

**LEE, LILY**

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**From:** LEE, LILY  
**Sent:** Tuesday, February 02, 2016 4:59 PM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO  
**Subject:** Hunters Point questions - introducing Derek to Marie and Maria

Dear Marie and Maria,

I wanted to introduce you to Derek Robinson, who is the Environmental Coordinator for the Navy working on Base Realignment and Closure (BRAC) at the Hunters Point Naval Shipyard. The Navy is the lead on the cleanup. They therefore have a lot more staff and data more readily available. I talked with him yesterday, and he agreed to help address your questions.

Dear Derek,

As you know, Marie Harrison is a community organizer at Greenaction and she is a long-term resident of the neighborhood where the Shipyard is located. I also want to introduce you to Maria, who is with the University of Santa Cruz, who has a team that is helping Greenaction analyze information about the cleanup.

I hope you can connect.

Thanks!

- Lily

Lily Lee  
Cleanup Project Manager  
Superfund Division  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne St. (SFD-8-3)  
San Francisco, CA 94105  
Tel: 415-947-4187, Fax: 415-947-3518  
[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

**From:** reigenlief@gmail.com [mailto:reigenlief@gmail.com] **On Behalf Of** Maria Caine  
**Sent:** Tuesday, February 02, 2016 4:05 PM  
**To:** LEE, LILY <LEE.LILY@EPA.GOV>  
**Cc:** marieh@greenaction.org; mariegreenaction@gmail.com  
**Subject:** Re: FW: Questions for Lily Lee

Hello Lily,

We would really appreciate you forwarding the questions for us. Thank you very much for your help!

--

The UCSC team

On Jan 29, 2016 4:30 PM, "LEE, LILY" <[LEE.LILY@epa.gov](mailto:LEE.LILY@epa.gov)> wrote:

Dear Marie,

Thank you for your questions. I'm sorry for the delay in responding. I've been out of the office for several days for a technical training I registered for months ago. It may be years before it's offered again in San Francisco.

The Navy is the lead on the cleanup, and EPA oversees its work. Since the Navy has the detailed data more easily readily available, I'd like to forward your questions to the Navy to respond to you directly, with a cc to EPA. Please let me know if you have any concerns about that approach. Thanks!

- Lily

Lily Lee

Cleanup Project Manager

Superfund Division

U.S. Environmental Protection Agency, Region 9

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San Francisco, CA 94105

Tel: 415-947-4187, Fax: 415-947-3518

[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

---

**From:** Marie [<mailto:MarieH@greenaction.org>]

**Sent:** Tuesday, January 26, 2016 1:17 PM

**To:** LEE, LILY <[LEE.LILY@EPA.GOV](mailto:LEE.LILY@EPA.GOV)>

**Subject:** Fwd: Questions for Lily Lee

Hello Lily;

please forward back to me the answers to these question to me as well as to the UCSC team

Marie H

----- Forwarded Message -----

**Subject:**Questions for Lily Lee

**Date:**Tue, 26 Jan 2016 12:10:13 -0800

**From:**Maria Caine <[maria.ep.caine@gmail.com](mailto:maria.ep.caine@gmail.com)>

**To:**[marieh@greenaction.org](mailto:marieh@greenaction.org)

Hello,

I'm sorry to be getting these questions to you almost a full week after the meeting, it's been a busy week. Here are some questions Lucien and I had that we didn't get a chance to ask.

- 1) Which sites are soil/debris being removed to?
- 2) What exposure did workers face during the removal of the sewer systems?
- 3) What were the levels of contamination found in the area surrounding the sewers before and after removal?
- 4) Will ground water be monitored in real time, continually, or by request?

Thank you again so much for having us and for hosting the meeting.

Thanks,

Maria, Lucien, and the UCSC team

**LEE, LILY**

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**From:** LEE, LILY  
**Sent:** Thursday, February 04, 2016 6:54 AM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO;Bacey, Juanita@DTSC  
**Subject:** Timing for mtg w/Greenaction?

Dear Derek and Nina,

I talked with Bradley on Tuesday. He'd like to set up a technical meeting soon with Navy, EPA, and DTSC. Can you let me know your schedule preferences over the next month or two? Derek, since you're out of town, you're most constrained, so maybe we should start with when you'll be in town next. Are you coming in for Amy's 2/24 mtg re transfers? If so, would late afternoon 2/23 or 2/24 work?

Thanks!

Lily Lee  
Cleanup Project Manager  
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## LEE, LILY

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**From:** LEE, LILY  
**Sent:** Wednesday, February 10, 2016 3:19 PM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO;Bacey, Juanita@DTSC;Lane, Jackie  
**Subject:** Topics - setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Dr. Hirsch just sent these topics.

Lily Lee  
Cleanup Project Manager  
Superfund Division  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne St. (SFD-8-3)  
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Tel: 415-947-4187, Fax: 415-947-3518  
[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

-----Original Message-----

From: Daniel O Hirsch [mailto:dohirsch@ucsc.edu]  
Sent: Wednesday, February 10, 2016 3:14 PM  
To: LEE, LILY <LEE.LILY@EPA.GOV>  
Cc: bradley@greenaction.org; Marie Harrison <marieH@greenaction.org>  
Subject: Re: setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Lily,

Among the technical issues about which we have questions and for which it would be helpful to have your technical people available who can answer questions in those areas are:

1. How the remediation goals for radionuclides were derived.
2. How the risk estimates for specific estimated radiation doses were derived, and how those doses themselves were derived.
3. The standards that have been and are being used to declare materials to be or not be low-level radioactive waste and where these materials have been and are being sent for disposal or recycling.
4. Questions about pre- and post-remediation risk assessments for both chemicals and radionuclides.
5. Numerous questions about status of characterization, environmental impact review, and remediation for different portions of HPBV.
6. Availability of various key documents.

We have some general questions about the above subject areas, but also detailed specific technical questions

**LEE, LILY**

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**From:** LEE, LILY  
**Sent:** Wednesday, February 17, 2016 9:56 AM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO;Bacey, Juanita@DTSC;Lane, Jackie  
**Subject:** RE: Topics - setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Dear Derek,

Bradley asked us to suggest times that work for us.

Re specific questions. I did leave a msg for Dan letting him know that if he isn't more specific that we may not have the answers right away. But sometimes we can just listen to the question, and if we don't have the answer right away, we can offer to get back to them later. I'm working with Nina on answering one of the specific questions we've already received re rad. It sounds like many of the questions are likely to relate to rad.

Re meeting in person, It's often better to meet in person to be able to look at data together more easily and to build a relationship. However, I understand that from San Diego can be difficult. So it sounds like they're more interested in talking sooner rather than later. Maybe conference call for you can be ok 2nd choice. But since we are local, we can meet in person and then call you and anyone else (e.g. RASO) in if necessary

Here's a survey about times. Can you check which ones might work for you?

You have initiated a poll "EJ Task Force - Hunters Pt" at Doodle. The link to your poll is:

<http://doodle.com/poll/8d4w2cy4bw9g86c4>

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[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

-----Original Message-----

From: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO [mailto:derek.j.robinson1@navy.mil]  
Sent: Wednesday, February 10, 2016 3:46 PM  
To: LEE, LILY <LEE.LILY@EPA.GOV>; Bacey, Juanita@DTSC <Juanita.Bacey@dtsc.ca.gov>; Lane, Jackie <Lane.Jackie@epa.gov>  
Subject: RE: Topics - setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Do we have a requested day/time for the meeting yet? If the Navy accepts the invitation to attend, I'll need to know as soon as possible to arrange for technical support to be available.

The topics "Numerous questions about status of characterization, environmental impact review, and remediation for different portions of HPBV" and "Questions about pre- and post-remediation risk assessments for both chemicals and

radionuclides" are too general to prepare for. Dr. Hirsch should be aware that if he cannot be more specific prior to the meeting, then the Navy/Agencies may not be prepared to answer questions.

What is the reason this meeting needs to be held in-person?

Derek

-----Original Message-----

From: LEE, LILY [mailto:LEE.LILY@EPA.GOV]

Sent: Wednesday, February 10, 2016 3:19 PM

To: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Bacey, Juanita@DTSC; Lane, Jackie

Subject: [Non-DoD Source] Topics - setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Dr. Hirsch just sent these topics.

Lily Lee

Cleanup Project Manager

Superfund Division

U.S. Environmental Protection Agency, Region 9

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[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

-----Original Message-----

From: Daniel O Hirsch [mailto:dohirsch@ucsc.edu]

Sent: Wednesday, February 10, 2016 3:14 PM

To: LEE, LILY <LEE.LILY@EPA.GOV>

Cc: bradley@greenaction.org; Marie Harrison <marieH@greenaction.org>

Subject: Re: setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Lily,

Among the technical issues about which we have questions and for which it would be helpful to have your technical people available who can answer questions in those areas are:

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2. How the risk estimates for specific estimated radiation doses were derived, and how those doses themselves were derived.
3. The standards that have been and are being used to declare materials to be or not be low-level radioactive waste and where these materials have been and are being sent for disposal or recycling.
4. Questions about pre- and post-remediation risk assessments for both chemicals and radionuclides.
5. Numerous questions about status of characterization, environmental impact review, and remediation for different portions of HPBV.
6. Availability of various key documents.

We have some general questions about the above subject areas, but also detailed specific technical questions



**LEE, LILY**

---

**From:** Chesnutt, John  
**Sent:** Thursday, February 18, 2016 2:09 PM  
**To:** Lansdale Lawrence  
**Subject:** Fwd: From Daniel Hirsch re rad questions

FYI

Begin forwarded message:

>  
>  
> -----Original Message-----  
> From: Daniel O Hirsch [mailto:dohirsch@ucsc.edu]  
> Sent: Wednesday, February 10, 2016 3:14 PM  
> To: LEE, LILY <LEE.LILY@EPA.GOV>  
> Cc: bradley@greenaction.org; Marie Harrison <marieH@greenaction.org>  
> Subject: Re: setting up meeting or conference call with epa, navy,  
> dtsc about shipyard environmental studies  
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> Lily,  
>  
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> 4. Questions about pre- and post-remediation risk assessments for both chemicals and radionuclides.  
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> We have some general questions about the above subject areas, but also  
> detailed specific technical questions  
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>  
>> On Feb 10, 2016, at 11:46 AM, LEE, LILY <LEE.LILY@EPA.GOV> wrote:  
>>  
>> Dear Bradley,

>>

>> Thank you for letting me know about your schedule. I am polling the others on their schedules. Could you tell me more about the technical areas you'd like to cover? That will help me make sure the people who have the information that you want will be available. Thanks!

>>

>> - Lily

>>

>> Lily Lee

>> Cleanup Project Manager

>> Superfund Division

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>> San Francisco, CA 94105

>> Tel: 415-947-4187, Fax: 415-947-3518 [www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

>>

>> -----Original Message-----

>> From: Bradley Angel [mailto:[bradley@greenaction.org](mailto:bradley@greenaction.org)]

>> Sent: Tuesday, February 09, 2016 5:11 PM

>> To: LEE, LILY <[LEE.LILY@EPA.GOV](mailto:LEE.LILY@EPA.GOV)>

>> Cc: Daniel O Hirsch <[dhirsch1@cruzio.com](mailto:dhirsch1@cruzio.com)>; Marie Harrison

>> <[marieH@greenaction.org](mailto:marieH@greenaction.org)>

>> Subject: Re: setting up meeting or conference call with epa, navy,

>> dtsc about shipyard environmental studies

>>

>> any update on setting up a phone meeting at least?

>>

>>> On 2/5/2016 8:52 AM, Bradley Angel wrote:

>>> Hi Lily,

>>> Thanks for offering to coordinate setting up a phone or in person

>>> meeting with EPA, Navy and DTSC (any other agencies?) to discuss the

>>> studies done on the shipyard and development.

>>> Tuesdays and Thursdays around 4 pm are the best.

>>> Let us know.

>>> Participating with us would be our technical advisers from UCSC, and

>>> would probably invite a couple of other folks such as Anthony Khalil

>>> from LEJ and Ray Tompkins.

>>>

>>> Bradley

>

**LEE, LILY**

---

**From:** LEE, LILY  
**Sent:** Friday, February 19, 2016 12:07 AM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO;Brasaemle, Karla  
**Subject:** Next Tues at 10 am? FW: setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Lily Lee  
Cleanup Project Manager  
Superfund Division  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne St. (SFD-8-3)  
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Tel: 415-947-4187, Fax: 415-947-3518  
[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

-----Original Message-----

From: Daniel Hirsch [mailto:dohirsch@ucsc.edu]  
Sent: Thursday, February 18, 2016 5:32 PM  
To: LEE, LILY <LEE.LILY@EPA.GOV>  
Cc: bradley@greenaction.org; Marie Harrison <marieH@greenaction.org>; Janice Davis <jadadavi@ucsc.edu>; Lucien Martin <lumamart@ucsc.edu>; Maria Caine <mcaine@ucsc.edu>; Janie Flores <jalflore@ucsc.edu>; Liora Huebner <lhuebner@ucsc.edu>  
Subject: Re: setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Hi Lily, Bradley and Marie,

In light of the inavailability of the Navy personnel late afternoon, can we do this as a conference call at 10 a.m. on Tuesday?

Also, to be clear, while it will be helpful to have people from the Navy who can help address some of these issues, we also want to be able to ask questions of knowledgeable staff from EPA and if possible DTSC, as these issues are ones that also involve their oversight of the Responsible Party.

To assist in the conversation, we intend to send to you in advance, for forwarding to the other participants, a few selected pages from key documents.

Thanks,

Daniel Hirsch

> On Feb 18, 2016, at 9:48 AM, LEE, LILY <LEE.LILY@EPA.GOV> wrote:

>

> Dear Bradley,

>

> I am working on gathering information regarding the radiation questions that we have received so far, and I'm trying to coordinate schedules with the right experts in the other agencies. The Navy let me know that their radiation experts

are located on the east coast, where 4 pm would be 7 pm for them. Is it possible to talk earlier in the day? We can host the meeting at USEPA if you like for those who can join in person. We can call the others from here. Would that work?

>

> Lily

>

> Lily Lee

> Cleanup Project Manager

> Superfund Division

> U.S. Environmental Protection Agency, Region 9

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> Tel: 415-947-4187, Fax: 415-947-3518 [www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

>

> -----Original Message-----

> From: Bradley Angel [mailto:[bradley@greenaction.org](mailto:bradley@greenaction.org)]

> Sent: Friday, February 05, 2016 8:52 AM

> To: LEE, LILY <[LEE.LILY@EPA.GOV](mailto:LEE.LILY@EPA.GOV)>

> Cc: Daniel O Hirsch <[dhirsch1@cruzio.com](mailto:dhirsch1@cruzio.com)>; Marie Harrison

> <[marieH@greenaction.org](mailto:marieH@greenaction.org)>

> Subject: setting up meeting or conference call with epa, navy, dtsc

> about shipyard environmental studies

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> Hi Lily,

> Thanks for offering to coordinate setting up a phone or in person meeting with EPA, Navy and DTSC (any other agencies?) to discuss the studies done on the shipyard and development.

> Tuesdays and Thursdays around 4 pm are the best.

> Let us know.

> Participating with us would be our technical advisers from UCSC, and would probably invite a couple of other folks such as Anthony Khalil from LEJ and Ray Tompkins.

>

> Bradley

>

**LEE, LILY**

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**From:** Chesnutt, John  
**Sent:** Friday, February 19, 2016 8:51 AM  
**To:** Lansdale, Lawrence L CIV NAVFAC HQ, BRAC PMO  
**Subject:** Re: From Daniel Hirsch re rad questions

Thanks. Yes we did. I rushed home, though, only to have her immediately leave the house for a 2 hr school mtg. So was sort of a bust. Such is life. Will celebrate this weekend.

> On Feb 19, 2016, at 8:47 AM, Lansdale, Lawrence L CIV NAVFAC HQ, BRAC PMO <lawrence.lansdale@navy.mil> wrote:  
>

> Thanks John.

> Hope your wife remembered your anniversary! Not sure if you heard Kathy, but she said one time both her and her husband forgot their anniversary.

> Regards

> Lawrence

>

>

> -----Original Message-----

> From: Chesnutt, John [mailto:Chesnutt.John@epa.gov]

> Sent: Thursday, February 18, 2016 2:09 PM

> To: Lansdale, Lawrence L CIV NAVFAC HQ, BRAC PMO

> Subject: [Non-DoD Source] Fwd: From Daniel Hirsch re rad questions

>

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> Begin forwarded message:

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>> Sent: Wednesday, February 10, 2016 3:14 PM

>> To: LEE, LILY <LEE.LILY@EPA.GOV>

>> Cc: bradley@greenaction.org; Marie Harrison <marieH@greenaction.org>

>> Subject: Re: setting up meeting or conference call with epa, navy,

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>>> On Feb 10, 2016, at 11:46 AM, LEE, LILY <LEE.LILY@EPA.GOV> wrote:

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>>> From: Bradley Angel [mailto:[bradley@greenaction.org](mailto:bradley@greenaction.org)]

>>> Sent: Tuesday, February 09, 2016 5:11 PM

>>> To: LEE, LILY <LEE.LILY@EPA.GOV>

>>> Cc: Daniel O Hirsch <[dhirsch1@cruzio.com](mailto:dhirsch1@cruzio.com)>; Marie Harrison

>>> <[marieH@greenaction.org](mailto:marieH@greenaction.org)>

>>> Subject: Re: setting up meeting or conference call with epa, navy,

>>> dtsc about shipyard environmental studies

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>>>>  
>>>> Bradley  
>>

**LEE, LILY**

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**From:** LEE, LILY  
**Sent:** Monday, February 22, 2016 11:10 AM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO  
**Cc:** Lane, Jackie;Bacey, Juanita@DTSC  
**Subject:** Thank you - RE: Topics - setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Dear Derek,

Thank you for sending this. I was going to start looking for a summary type document, but I'm glad you beat me to it! I hope this will help him. In the mean time, Nina and I have been working on researching another question from the same organization.

- Lily

Lily Lee  
Cleanup Project Manager  
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[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

-----Original Message-----

From: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO [mailto:derek.j.robinson1@navy.mil]  
Sent: Friday, February 19, 2016 2:04 PM  
To: Daniel O Hirsch <IMCEAMAILTO-dohirsch+40ucsc+2Eedu@nmci-isf.com>  
Cc: bradley@greenaction.org; Marie Harrison (marieh@greenaction.org) <marieh@greenaction.org>; LEE, LILY <LEE.LILY@EPA.GOV>  
Subject: RE: Topics - setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Dear Mr. Hirsch,

I was forwarded the below list of topics from Ms. Lily Lee. The attached document on radiological work at Hunters Point may answer a majority of your questions. Besides the body of the text, Table 1 may also be useful.

Please feel free to contact me if you have any questions.

Best Regards,

Derek J. Robinson, PE  
BRAC Environmental Coordinator  
Navy BRAC PMO West  
33000 Nixie Way  
Bldg 50  
San Diego CA 92147  
Desk Phone: 619-524-6026



-----Original Message-----

From: LEE, LILY [mailto:LEE.LILY@EPA.GOV]

Sent: Wednesday, February 10, 2016 3:19 PM

To: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Bacey, Juanita@DTSC; Lane, Jackie

Subject: [Non-DoD Source] Topics - setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

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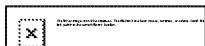
**From:** LEE, LILY  
**Sent:** Wednesday, February 24, 2016 5:20 PM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO;Franklin, William D CIV NAVFAC HQ, BRAC PMO;Bacey, Juanita@DTSC;Lane, Jackie;Daniel Hirsch;bradley@greenaction.org;Marie Harrison  
**Subject:** Survey for times for Hunters Pt technical mtg w/Greenaction

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- Lily

Lily Lee  
Cleanup Project Manager  
Superfund Division  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne St. (SFD-8-3)  
San Francisco, CA 94105  
Tel: 415-947-4187, Fax: 415-947-3518  
[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)



Hi there,

Lily Lee ([lee.lily@epa.gov](mailto:lee.lily@epa.gov)) invites you to participate in the Doodle poll "Hunters Pt Mtg w/Greenaction."

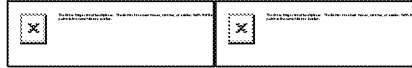
**Participate now**



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Doodle AG, Werdstrasse 21, 8021 Zürich

## LEE, LILY

---

**From:** Franklin, William D CIV NAVFAC HQ, BRAC PMO <william.d.franklin@navy.mil>  
**Sent:** Wednesday, March 02, 2016 12:43 PM  
**To:** LEE, LILY  
**Cc:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Janda, Danielle L CIV NAVFAC SW; Edwards, Zachary L CIV SEA 04 04N; Chesnutt, John  
**Subject:** RE: Scheduling Rad Mtg w/Greenaction

Lily, please feel free to schedule a morning call (PST) three weeks out from the date you proposed in your earlier survey. Let us know ASAP, so we can relay the date/time back to RASO. Thanks, Bill

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Sent: Wednesday, March 02, 2016 10:04 AM  
To: Franklin, William D CIV NAVFAC HQ, BRAC PMO  
Cc: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Janda, Danielle L CIV NAVFAC SW; Edwards, Zachary L CIV SEA 04 04N; Chesnutt, John  
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From: Daniel Hirsch [mailto:dohirsch@ucsc.edu]

Sent: Friday, February 26, 2016 2:18 PM

To: LEE, LILY <LEE.LILY@EPA.GOV>

Cc: bradley@greenaction.org; Marie Harrison <marieH@greenaction.org>; Janice Davis <jadadavi@ucsc.edu>; Lucien Martin <lumamart@ucsc.edu>; Maria Caine <mcaine@ucsc.edu>; Janie Flores <jalflore@ucsc.edu>; Liora Huebner <lhuebner@ucsc.edu>

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**LEE, LILY**

---

**From:** LEE, LILY  
**Sent:** Tuesday, March 08, 2016 4:30 PM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO  
**Subject:** RE: Scheduling Rad Mtg w/Greenaction

Welcome back! Thank you for offering the wk of 3/21. I had been surveying Tuesdays at 10 am, since that seemed to work for the others. Would 3/22, 3/29, 4/12 at 10 am work?

Lily Lee  
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-----Original Message-----

From: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO [mailto:derek.j.robinson1@navy.mil]  
Sent: Monday, March 07, 2016 2:32 PM  
To: LEE, LILY <LEE.LILY@EPA.GOV>  
Cc: Janda, Danielle L CIV NAVFAC SW <danielle.janda@navy.mil>; Edwards, Zachary L CIV SEA 04 04N <zachary.edwards@navy.mil>; Chesnutt, John <Chesnutt.John@epa.gov>; Franklin, William D CIV NAVFAC HQ, BRAC PMO <william.d.franklin@navy.mil>  
Subject: RE: Scheduling Rad Mtg w/Greenaction

Hi Lily,

Have you sent a response to Bill's email below.

I tried responding to the doodle survey, but it's not working and I can't see the new(?) proposed times. I coordinated availability and responded on the first set of dates you suggested and believe that they are good, but we will still need time to prepare once an agenda is set and agreed on (i.e., not this week). Please let me know the proposed date as soon as you can. If a date hasn't been suggested, please try for the week of March 21.

From Mr. Hirsch's email, below is a suggested agenda that I am hoping you can send out for EPA and Greenaction's comment/concurrence. We need to pin this down so that my folks can set aside the time and prepare for topics. Until the agenda is set, a date has been selected, and my folks have responded back, I can only commit to endeavoring to get everyone to the meeting.

1. Derivation of remediation goals for radionuclides - 10 min  
2. Risk estimates calculations - 10 min  
3. Consistency with EPA methodology - 10 min  
4. Disposal requirements - 10 min  
4. CERCLA risk assessment process - 10 min  
5. Misc. Topics - 15 min  
6. Document availability - 5 min

Thanks to Bill for coordinating while I was out.

Derek

-----Original Message-----

From: Franklin, William D CIV NAVFAC HQ, BRAC PMO

Sent: Wednesday, March 02, 2016 12:43 PM

To: LEE, LILY

Cc: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Janda, Danielle L CIV NAVFAC SW; Edwards, Zachary L CIV SEA 04 04N; Chesnutt, John

Subject: RE: Scheduling Rad Mtg w/Greenaction

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Cc: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Janda, Danielle L CIV NAVFAC SW; Edwards, Zachary L CIV SEA 04 04N; Chesnutt, John

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<<http://doodle.com/graphics/emails0/info.png>>

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<<https://app.adjust.io/9wf3k9>> <<https://app.adjust.com/sxd4md>>

Doodle AG, Werdstrasse 21, 8021 Zürich

## LEE, LILY

---

**From:** LEE, LILY  
**Sent:** Tuesday, March 08, 2016 4:31 PM  
**To:** Franklin, William D CIV NAVFAC HQ, BRAC PMO; Janda, Danielle L CIV NAVFAC SW; zachary.edwards@navy.mil  
**Cc:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO  
**Subject:** 3/22, 3/29, or 4/12 at 10 am Pac time? FW: Scheduling Rad Mtg w/Greenaction

Sorry I forgot to hit "reply all"

Lily Lee  
Cleanup Project Manager  
Superfund Division  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne St. (SFD-8-3)  
San Francisco, CA 94105  
Tel: 415-947-4187, Fax: 415-947-3518  
[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

-----Original Message-----

From: LEE, LILY  
Sent: Tuesday, March 08, 2016 4:30 PM  
To: 'Robinson, Derek J CIV NAVFAC HQ, BRAC PMO' <derek.j.robinson1@navy.mil>  
Subject: RE: Scheduling Rad Mtg w/Greenaction

Welcome back! Thank you for offering the wk of 3/21. I had been surveying Tuesdays at 10 am, since that seemed to work for the others. Would 3/22, 3/29, 4/12 at 10 am work?

Lily Lee  
Cleanup Project Manager  
Superfund Division  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne St. (SFD-8-3)  
San Francisco, CA 94105  
Tel: 415-947-4187, Fax: 415-947-3518  
[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

-----Original Message-----

From: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO [mailto:derek.j.robinson1@navy.mil]  
Sent: Monday, March 07, 2016 2:32 PM  
To: LEE, LILY <LEE.LILY@EPA.GOV>  
Cc: Janda, Danielle L CIV NAVFAC SW <danielle.janda@navy.mil>; Edwards, Zachary L CIV SEA 04 04N <zachary.edwards@navy.mil>; Chesnutt, John <Chesnutt.John@epa.gov>; Franklin, William D CIV NAVFAC HQ, BRAC PMO <william.d.franklin@navy.mil>  
Subject: RE: Scheduling Rad Mtg w/Greenaction

Hi Lily,

Have you sent a response to Bill's email below.

I tried responding to the doodle survey, but it's not working and I can't see the new(?) proposed times. I coordinated availability and responded on the first set of dates you suggested and believe that they are good, but we will still need time to prepare once an agenda is set and agreed on (i.e., not this week). Please let me know the proposed date as soon as you can. If a date hasn't been suggested, please try for the week of March 21.

From Mr. Hirsch's email, below is a suggested agenda that I am hoping you can send out for EPA and Greenaction's comment/concurrence. We need to pin this down so that my folks can set aside the time and prepare for topics. Until the agenda is set, a date has been selected, and my folks have responded back, I can only commit to endeavoring to get everyone to the meeting.

1. Derivation of remediation goals for radionuclides - 10 min 2. Risk estimates calculations - 10 min 3. Consistency with EPA methodology - 10 min 4. Disposal requirements - 10 min 4. CERCLA risk assessment process - 10 min 5. Misc. Topics - 15 min 6. Document availability - 5 min

Thanks to Bill for coordinating while I was out.

Derek

-----Original Message-----

From: Franklin, William D CIV NAVFAC HQ, BRAC PMO

Sent: Wednesday, March 02, 2016 12:43 PM

To: LEE, LILY

Cc: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Janda, Danielle L CIV NAVFAC SW; Edwards, Zachary L CIV SEA 04 04N; Chesnutt, John

Subject: RE: Scheduling Rad Mtg w/Greenaction

Lily, please feel free to schedule a morning call (PST) three weeks out from the date you proposed in your earlier survey. Let us know ASAP, so we can relay the date/time back to RASO. Thanks, Bill

-----Original Message-----

From: LEE, LILY [mailto:LEE.LILY@EPA.GOV]

Sent: Wednesday, March 02, 2016 10:04 AM

To: Franklin, William D CIV NAVFAC HQ, BRAC PMO

Cc: Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Janda, Danielle L CIV NAVFAC SW; Edwards, Zachary L CIV SEA 04 04N; Chesnutt, John

Subject: [Non-DoD Source] Scheduling Rad Mtg w/Greenaction

Dear Bill,

Since Derek is out, could you please help schedule this conference call with RASO? Greenaction requested this technical meeting almost 2 months ago. I have sent Derek several sets of proposed times that we moved to the morning at his request to facilitate RASO participation. I have not heard back from the Navy on this latest set of proposed times I sent last Wednesday. Given the many delays, we'd like to move forward with this as soon as possible. For your convenience, I am forwarding again the previous messages I had sent giving the topics that Greenaction has requested to discuss, which I sent to Derek several weeks ago. Thank you for your help.

- Lily

From: LEE, LILY

Sent: Wednesday, February 24, 2016 5:20 PM

To: 'Robinson, Derek J CIV NAVFAC HQ, BRAC PMO' <derek.j.robinson1@navy.mil>; 'Franklin, William D CIV NAVFAC HQ, BRAC PMO' <william.d.franklin@navy.mil>; Bacey, Juanita@DTSC <Juanita.Bacey@dtsc.ca.gov>; Lane, Jackie <Lane.Jackie@epa.gov>; 'Daniel Hirsch' <dohirsch@ucsc.edu>; bradley@greenaction.org; Marie Harrison <marieH@greenaction.org>

Subject: Survey for times for Hunters Pt technical mtg w/Greenaction

Derek asked for morning times to facilitate RASO participation by phone. Tuesdays at 10 am seems to work for Dan and Bradley sometimes. Could you please forward this survey to the people you would like to participate? Please click on the Participate now blue button below to pick the times that work best for you. Dan Hirsch, UC Santa Cruz, who is serving as technical advisor to Greenaction, has said, To assist in the conversation, we intend to send to you in advance, for forwarding to the other participants, a few selected pages from key documents.

I can get a room at USEPA for any local participants and set up a conference call line for any remote participants. Thank you for your participation.

- Lily

Lily Lee

Cleanup Project Manager

Superfund Division

U.S. Environmental Protection Agency, Region 9

75 Hawthorne St. (SFD-8-3)

San Francisco, CA 94105

Tel: 415-947-4187, Fax: 415-947-3518

[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)



<[https://doodle.com/?tmail=poll\\_invitecontact\\_participant\\_invitation&tlink=logo](https://doodle.com/?tmail=poll_invitecontact_participant_invitation&tlink=logo)>

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<<http://doodle.com/graphics/emails0/info.png>>

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<<https://app.adjust.io/9wf3k9>> <<https://app.adjust.com/sxd4md>>

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Lily Lee

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San Francisco, CA 94105

Tel: 415-947-4187, Fax: 415-947-3518

[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

From: LEE, LILY

Sent: Friday, February 26, 2016 5:13 PM

To: 'Robinson, Derek J CIV NAVFAC HQ, BRAC PMO' <derek.j.robinson1@navy.mil>; 'Franklin, William D CIV NAVFAC HQ, BRAC PMO' <william.d.franklin@navy.mil>; 'Bacey, Juanita@DTSC' <Juanita.Bacey@dtsc.ca.gov>

Subject: Topic for Rad Mtg w/Greenaction

I just got the attached from Dan Hirsch. For your convenience, I am also including his questions from before below. In addition, if you haven't already, please respond to the survey re times below. Thanks!

Lily Lee

Cleanup Project Manager

Superfund Division

U.S. Environmental Protection Agency, Region 9

75 Hawthorne St. (SFD-8-3)

San Francisco, CA 94105

Tel: 415-947-4187, Fax: 415-947-3518

[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

From: Daniel Hirsch [mailto:dohirsch@ucsc.edu]

Sent: Friday, February 26, 2016 2:18 PM

To: LEE, LILY <LEE.LILY@EPA.GOV>

Cc: bradley@greenaction.org; Marie Harrison <marieH@greenaction.org>; Janice Davis <jadadavi@ucsc.edu>; Lucien Martin <lumamart@ucsc.edu>; Maria Caine <mcaine@ucsc.edu>; Janie Flores <jalflore@ucsc.edu>; Liora Huebner <lhuebner@ucsc.edu>

Subject: Re: Which documents? RE: Survey for times for Hunters Pt technical mtg w/Greenaction

Hi Lily,

I must confess to be getting more and more perplexed by this situation. For two months we've been trying to obtain information on pretty elementary matters about the Hunters Point Bayview (HPBV) cleanup, particularly about how standards for cleanup and waste disposal have been adopted, models chosen, and risk assessment conclusions reached. Two of my students drove to San Francisco to attend a public meeting with agency officials, but could get no answers. We've tried ever since to arrange a conference call with experts from EPA, DTSC, and other agencies to try to get these matters clarified, so far to no avail.

You indicate you are new to the project and fairly unfamiliar with it. But surely you must have technical members of your team involved in the EPA oversight of the cleanup and review and approval of key documents.

They are about fairly fundamental issues, which EPA has approved and which are repeated in current cleanup proposals that EPA presumably is also evaluating.

The Navy sent us one document, similar to others we have been reviewing, including a table of the cleanup standards being employed and their sources. You received a copy as well. Those standards appear to be essentially the same as found in current proposals. Because this is an NPL site, EPA has to review and sign off on these standards and models as consistent with EPA CERCLA guidance. We want to ask questions about how that determination was made.

I enclose a compilation of key pages of a few other documents that we had prepared for the conference call. Again, surely EPA has reviewed these, and is reviewing similar sections in pending documents. We would appreciate being able to ask your subject matter experts who have been involved in this review some fundamental questions. Similarly, DTSC has been reviewing and OK'ing HPBV documents, and we want to be able to ask questions of their subject matter experts.

Please understand, if we are having trouble getting anyone in your agencies to answer fundamental questions about HPBV, imagine how the impacted community must feel.

Please let me know when we can have that call.

Sincerely,

Daniel Hirsch

From: Daniel O Hirsch [mailto:dohirsch@ucsc.edu]

Sent: Wednesday, February 10, 2016 3:14 PM

To: LEE, LILY <LEE.LILY@EPA.GOV>

Cc: bradley@greenaction.org; Marie Harrison <marieH@greenaction.org>

Subject: Re: setting up meeting or conference call with epa, navy, dtsc about shipyard environmental studies

Lily,

Among the technical issues about which we have questions and for which it would be helpful to have your technical people available who can answer questions in those areas are:

1. How the remediation goals for radionuclides were derived.
2. How the risk estimates for specific estimated radiation doses were derived, and how those doses themselves were derived.
3. The standards that have been and are being used to declare materials to be or not be low-level radioactive waste and where these materials have been and are being sent for disposal or recycling.
4. Questions about pre- and post-remediation risk assessments for both chemicals and radionuclides.

5. Numerous questions about status of characterization, environmental impact review, and remediation for different portions of HPBV.

6. Availability of various key documents.

We have some general questions about the above subject areas, but also detailed specific technical questions

To: 'Robinson, Derek J CIV NAVFAC HQ, BRAC PMO' <derek.j.robinson1@navy.mil>; 'Franklin, William D CIV NAVFAC HQ, BRAC PMO' <william.d.franklin@navy.mil>; Bacey, Juanita@DTSC <Juanita.Bacey@dtsc.ca.gov>; Lane, Jackie <Lane.Jackie@epa.gov>; 'Daniel Hirsch' <dohirsch@ucsc.edu>; bradley@greenaction.org <mailto:bradley@greenaction.org>; Marie Harrison <marieH@greenaction.org>  
Subject: Survey for times for Hunters Pt technical mtg w/Greenaction

Derek asked for morning times to facilitate RASO participation by phone. Tuesdays at 10 am seems to work for Dan and Bradley sometimes. Could you please forward this survey to the people you would like to participate? Please click on the Participate now blue button below to pick the times that work best for you. Dan Hirsch, UC Santa Cruz, who is serving as technical advisor to Greenaction, has said, To assist in the conversation, we intend to send to you in advance, for forwarding to the other participants, a few selected pages from key documents.

I can get a room at USEPA for any local participants and set up a conference call line for any remote participants. Thank you for your participation.

- Lily

Lily Lee

Cleanup Project Manager

Superfund Division

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Doodle AG, Werdstrasse 21, 8021 Zurich



## LEE, LILY

---

**From:** LEE, LILY  
**Sent:** Thursday, March 10, 2016 3:39 PM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO  
**Subject:** Background context for my call - Rad inquiry from member of the public

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear Derek,

I will be calling you in a minute, but for background context, I wanted to send you the message below that Nina got from a member of the public (scroll down). I have been working on it with her.

In response to Nina's questions, to see if I could duplicate Ms. Montelongo-Acosta's I just did a simple multiplication of

$70 \text{ years} \times (5.43 \text{ mrem/yr}) \times (10^{-3} \text{ rem/mrem}) \times (1.16 \times 10^{-3} \text{ excess cancer risk/rem}) = 4.4 \times 10^{-4} \text{ excess cancer risk for lifetime}$

Currently USEPA assumes 26 years as the likely time people would live in a single home before they move to another home. And the current  $8.46 \times 10^{-4}$  excess cancer/rem is what EPA uses, though EPA is considering adopting the NAS number cited below of  $1.16 \times 10^{-3}$ . That comes out to  $1.2 \times 10^{-4}$ , which rounds down to  $10^{-4}$

The email below refers to a part of the ROD that describes actual risk before remediation. What we would evaluate is the residual risk after remediation. I checked the 2012 Rad RACR for Parcel B, which includes the bldgs. I found this below in the RACR.

Using the method from Ms. Montelonga-Acosta:

Residual dose  $0.2596 \text{ mrem/y} \times 70 \text{ yrs} \times 1.16 \text{ E-3} = 21 \text{ E-6} = 2.1 \text{ E-5}$ , which is in the EPA risk range.

Using the EPA current practice of assuming 26 yrs exposure &  $8.46 \text{ E-4}$ , the risk would be  $57 \text{ E-7} = 5.7 \text{ E-6}$ .

Both of these are within the EPA risk range.

[http://www.envirostor.dtsc.ca.gov/regulators/deliverable\\_documents/9856556534/Hunters%20Point\\_Final%20Radiological%20Removal%20Action%20Completion%20Report%201of38\\_03.02.2012.pdf](http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/9856556534/Hunters%20Point_Final%20Radiological%20Removal%20Action%20Completion%20Report%201of38_03.02.2012.pdf)

p. 89 of pdf, p. 4-11 of hard copy:

“RESRAD modeling was performed using the maximum Cs-137 concentration of 0.2043 pCi/g obtained from the discharge pipes. (Separate modeling efforts were performed for the Discharge Channel and are summarized in Section 4.4.2.) Modeling was performed using default parameters and the discharge pipes were assumed to be completely filled with soil/sediment at this activity concentration. The RESRAD modeling results indicated a residual dose of 0.2596 mrem/y with an excess lifetime cancer risk of  $4.236 \times 10^{-6}$ . These results fall within the acceptable NCP risk management range of  $10^{-6}$  to  $10^{-4}$ , which supports radiological free release. The modeling parameters and results were presented in Attachment 3 to the Technical Memorandum (Appendix U).



#### 4.3.4 Building 140 Regulatory Concurrence

The Draft Technical Memorandum was submitted to the regulatory agencies for review. Comments to the Building 140 Technical Memorandum were provided by the EPA and DTSC in June 2011 and responses were prepared. The Final Technical Memorandum (Appendix U) incorporated the responses to comments submitted by the EPA and DTSC and was published on July 20, 2011. The DTSC and CDPH subsequently concurred with the radiological release for unrestricted use of Building 140 (Appendix R). According to previous statements by the EPA, their decision for radiological free release of the Parcel B buildings/structure and former building sites will be based on the data and analyses presented in this Radiological RACR.

**From:** Janice Montelongo-Acosta [<mailto:janice.pma@gmail.com>]

**Sent:** Thursday, January 28, 2016 5:17 PM

**To:** Bacey, Juanita@DTSC

**Subject:** Questions about Final Amended Parcel B Record of Decision for Hunters Point

Greetings, I hope this email finds you well.

I am a local Bay Area community member with an inquiry concerning the radiological risk and dose calculations presented on the amended ROD for Parcel B of Hunters Point. I will be using table 7-3 on page 105 of the document as a specific reference.

The issue is that there is no clear methodology of how the risk numbers on the table were obtained. Essentially, the calculations for radiological risk do not, on the surface, make sense. Let's say one were to use the numbers pushed forward by the National Academy of Sciences to calculate radiological risk ( $1.16 \times 10^{-3}$  risk/rem). For the total lifetime radiological risk for building 140, for example, the calculation would be  $4.4 \times 10^{-4}$  risk, which is hundreds of times bigger the  $1.44 \times 10^{-6}$  shown on the chart. This trend follows up with other impacted buildings.

The table notes include no additional information about how the numbers were calculated. Will it be possible for you to direct me to that information, or perhaps even direct me to someone who will be able to explain these calculations? It would be much appreciated.

Thank you for your time and consideration. I look forward to your reply.

**TABLE 7-3: RADIOLOGICAL RISK RESULTS**  
Parcel B Amended Record of Decision, Hunters Point Shipyard, San Francisco, California

RESRAD-BUILD Results		
Impacted Building	Radiological Risk <sup>a,b</sup>	Dose (millirem/year)
Building 103	$1.48 \times 10^{-6}$	7.02
Building 113	$1.48 \times 10^{-6}$	7.02
Building 113A	$1.60 \times 10^{-6}$	1.45
Building 130	$1.60 \times 10^{-6}$	1.45
Building 140	$1.44 \times 10^{-6}$	5.43
Building 145	$1.16 \times 10^{-6}$	1.20

Notes:

- <sup>a</sup> Total risk and dose is equivalent to incremental risk and dose. Actual calculated dose and risk will be based on field measurements from the final status survey results. Incremental dose does not include risk from atmospheric present at or below ambient levels. Total risk includes risk from all chemical concentrations.
- <sup>b</sup> Total excess lifetime cancer risk

--  
Janice







## LEE, LILY

**From:** LEE, LILY  
**Sent:** Monday, March 14, 2016 2:29 PM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO  
**Subject:** I've cut & pasted time slots from previous email - FW: Updated survey for times for Hunters Pt Mtg w/Greenaction

Dear Derek,

I'm sorry you're having trouble viewing the survey. Here is the list of time slots again, cut & pasted from last week's email.

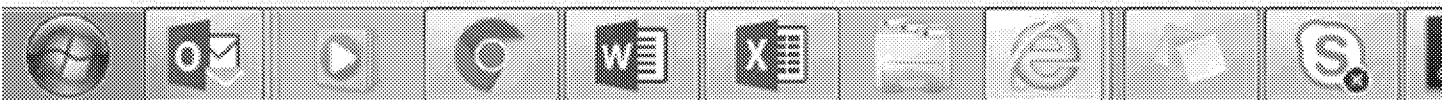
# Doodle

	Time 1	Time 2
 Tue, 3/22/16	10:00 AM	
 Wed, 3/23/16	10:00 AM	11:00 AM
 Thu, 3/24/16	1:00 PM	
 Tue, 3/29/16	10:00 AM	
 Wed, 3/30/16	10:00 AM	11:00 AM
 Thu, 3/31/16	1:00 PM	
 Tue, 4/12/16	10:00 AM	11:00 AM
 Wed, 4/13/16	9:30 AM	

Add further time slots

Copy and paste first row

Done



Lily Lee  
Cleanup Project Manager

Superfund Division  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne St. (SFD-8-3)  
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[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

---

**From:** LEE, LILY

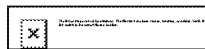
**Sent:** Friday, March 11, 2016 11:54 AM

**To:** bradley@greenaction.org; 'Daniel Hirsch' <dohirsch@ucsc.edu>; 'Marie Harrison' <marieH@greenaction.org>; Lane, Jackie <Lane.Jackie@epa.gov>; 'Robinson, Derek J CIV NAVFAC HQ, BRAC PMO' <derek.j.robinson1@navy.mil>; 'zachary.edwards@navy.mil' <zachary.edwards@navy.mil>; 'Franklin, William D CIV NAVFAC HQ, BRAC PMO' <william.d.franklin@navy.mil>; Terry, Robert <Terry.Robert@epa.gov>; Bacey, Juanita@DTSC <Juanita.Bacey@dtsc.ca.gov>

**Subject:** Updated survey for times for Hunters Pt Mtg w/Greenaction

I had originally sent out a poll for Tuesdays at 10 am because that is what Dan Hirsch had previously suggested. The Navy said they could meet the weeks of 3/21 or later, but both Dan Hirsch and Bradley Angel said they could not make it on Tuesdays at 10 am on 3/22 and 3/29. The Navy confirmed that Tuesday, 4/12, at 10 am will work well for them. In case that doesn't work for Dan and Bradley, I talked to Bradley a few days ago, and he invited me to try other times besides just Tuesdays at 10 am. I have revised the poll to include more variety of times. Please click on the button below to participate in the poll. Since the Navy computer system cannot always access the poll, I have cut and pasted the time slots below. Anyone who can't see the poll can just email me the time they are available, and I'll enter it for them. I'm sorry it's hard to get so many people's schedules to work out. But I hope one of these time slots will work.

Lily Lee invites you to participate in the Doodle poll "Hunters Pt Mtg w/Greenaction."



---

Hi there,

Lily Lee ([lee.lily@epa.gov](mailto:lee.lily@epa.gov)) invites you to participate in the Doodle poll "Hunters Pt Mtg w/Greenaction."

**Participate now**



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Doodle is also available  
for iOS and Android.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Doodle AG, Werdstrasse 21, 8021 Zürich

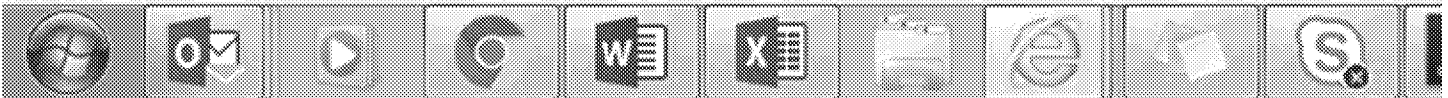
# Doodle

	Time 1	Time 2
 Tue, 3/22/16	10:00 AM	
 Wed, 3/23/16	10:00 AM	11:00 AM
 Thu, 3/24/16	1:00 PM	
 Tue, 3/29/16	10:00 AM	
 Wed, 3/30/16	10:00 AM	11:00 AM
 Thu, 3/31/16	1:00 PM	
 Tue, 4/12/16	10:00 AM	11:00 AM
 Wed, 4/13/16	9:30 AM	

Add further time slots

Copy and paste first row

Done



## LEE, LILY

---

**From:** LEE, LILY  
**Sent:** Thursday, March 17, 2016 9:32 AM  
**To:** bradley@greenaction.org  
**Cc:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO;Marie Harrison;Franklin, William D CIV NAVFAC HQ, BRAC PMO;Lane, Jackie;Daniel Hirsch;Bacey, Juanita@DTSC  
**Subject:** Hunters Point technical meeting with Navy, DTSC, & EPA - timing & proposed agenda

Dear Bradley,

I'm glad I got to talk with you yesterday at the EJ Task Force meeting. As you requested, out of the 13 times I put in the survey, the Navy, DTSC, and EPA are available April 12 at 10 am or 11 am and April 13 at 9:30 am for a one-hour meeting or call. Below is a screenshot showing showing responses thus far to the 13 proposed times. Here's the link to the electronic version of the poll: <http://doodle.com/poll/3zvvyh3wq8s3g276>. Since no one single time slot is good for all poll respondents, I can propose more alternative times if you like.

In addition, Derek Robinson (Navy) offered to respond sooner in writing to any specific questions that you would like to send in writing. EPA can do that as well. Derek also proposed a draft agenda below based on the general topics that Dan Hirsch provided below. From Derek Robinson (Navy):

"From Mr. Hirsch's email, below is a suggested agenda that I am hoping you can send out for EPA and Greenaction's comment/concurrence. We need to pin this down so that my folks can set aside the time and prepare for topics. Until the agenda is set, a date has been selected, and my folks have responded back, I can only commit to endeavoring to get everyone to the meeting.

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2. Risk estimates calculations - 10 min
3. Consistency with EPA methodology - 10 min
4. Disposal requirements - 10 min
4. CERCLA risk assessment process - 10 min
5. Misc. Topics - 15 min
6. Document availability - 5 min"

Please let me know how you would like to proceed.

**Doodle** ★ Features ★ Pricing

9 participants

	March 2016										April 2016	
	Tue 22	Wed 23	Thu 24	Fri 25	Sat 26	Sun 27	Mon 28	Tue 29	Wed 30	Thu 31	Fri 1	Sat 2
Nina DTSC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jackie Lane	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bradley Angel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Daniel Hirsch	?	?	?	?	?	?	?	?	?	?	?	?
Rob Terry EPA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Maria (UCSC)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lucien (UCSC)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Janie	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Navy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Your name	□	□	□	□	□	□	□	□	□	□	□	□
	5	6	4	2	5	5	4	2	2	5	6	2

Done

From Dan Hirsch:

“Among the technical issues about which we have questions and for which it would be helpful to have your technical people available who can answer questions in those areas are:

1. How the remediation goals for radionuclides were derived.
2. How the risk estimates for specific estimated radiation doses were derived, and how those doses themselves were derived.
3. The standards that have been and are being used to declare materials to be or not be low-level radioactive waste and where these materials have been and are being sent for disposal or recycling.
4. Questions about pre- and post-remediation risk assessments for both chemicals and radionuclides.
5. Numerous questions about status of characterization, environmental impact review, and remediation for different portions of HPBV.
6. Availability of various key documents.

We have some general questions about the above subject areas, but also detailed specific technical questions”

Lily Lee  
Cleanup Project Manager  
Superfund Division  
U.S. Environmental Protection Agency, Region 9  
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San Francisco, CA 94105  
Tel: 415-947-4187, Fax: 415-947-3518  
[www.epa.gov/region9/superfund](http://www.epa.gov/region9/superfund)

## LEE, LILY

---

**From:** LEE, LILY  
**Sent:** Thursday, March 17, 2016 10:00 AM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Franklin, William D CIV NAVFAC HQ, BRAC PMO  
**Cc:** Lane, Jackie; Bacey, Juanita@DTSC; zachary.edwards@navy.mil; Janda, Danielle L CIV NAVFAC SW  
**Subject:** Written answers to questions already received re rad release criteria & risk

Dear Derek & Bill,

It sounds like Bradley wants written answers to the questions Dan already sent. I'll take responsibility for the question about consistency with EPA methodology. In addition, I am resending for reference the email I sent last week about the question Nina already got. We discovered that Ms. Montelongo-Acosta is associated with the UCSC Nuclear Policy program. Finally, when you were out of the office a few weeks ago, I talked to Danielle about Table 7-3 below.

**From:** LEE, LILY  
**Sent:** Thursday, March 10, 2016 3:38 PM  
**To:** 'Robinson, Derek J CIV NAVFAC HQ, BRAC PMO' <derek.j.robinson1@navy.mil>  
**Subject:** Background context for my call - Rad inquiry from member of the public

Dear Derek,

I will be calling you in a minute, but for background context, I wanted to send you the message below that Nina got from a member of the public (scroll down). I have been working on it with her.

In response to Nina's questions, to see if I could duplicate Ms. Montelongo-Acosta's I just did a simple multiplication of

$70 \text{ years} \times (5.43 \text{ mrem/yr}) \times (10^{-3} \text{ rem/mrem}) \times (1.16 \times 10^{-3} \text{ excess cancer risk/rem}) = 4.4 \times 10^{-4} \text{ excess cancer risk for lifetime}$

Currently USEPA assumes 26 years as the likely time people would live in a single home before they move to another home. And the current  $8.46 \times 10^{-4}$  excess cancer/rem is what EPA uses, though EPA is considering adopting the NAS number cited below of  $1.16 \times 10^{-3}$ . That comes out to  $1.2 \times 10^{-4}$ , which rounds down to  $10^{-4}$

The email below refers to a part of the ROD that describes actual risk before remediation. What we would evaluate is the residual risk after remediation. I checked the 2012 Rad RACR for Parcel B, which includes the bldgs. I found this below in the RACR.

Using the method from Ms. Montelonga-Acosta:

Residual dose  $0.2596 \text{ mrem/y} \times 70 \text{ yrs} \times 1.16 \text{ E-3} = 21 \text{ E-6} = 2.1 \text{ E-5}$ , which is in the EPA risk range.

Using the EPA current practice of assuming 26 yrs exposure &  $8.46 \text{ E-4}$ , the risk would be  $57 \text{ E-7} = 5.7 \text{ E-6}$ .

Both of these are within the EPA risk range.

[http://www.envirostor.dtsc.ca.gov/regulators/deliverable\\_documents/9856556534/Hunters%20Point\\_Final%20Radiological%20Removal%20Action%20Completion%20Report%201of38\\_03.02.2012.pdf](http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/9856556534/Hunters%20Point_Final%20Radiological%20Removal%20Action%20Completion%20Report%201of38_03.02.2012.pdf)



p. 89 of pdf, p. 4-11 of hard copy:

“RESRAD modeling was performed using the maximum Cs-137 concentration of 0.2043 pCi/g obtained from the discharge pipes. (Separate modeling efforts were performed for the Discharge Channel and are summarized in Section 4.4.2.) Modeling was performed using default parameters and the discharge pipes were assumed to be completely filled with soil/sediment at this activity concentration. The RESRAD modeling results indicated a residual dose of 0.2596 mrem/y with an excess lifetime cancer risk of  $4.236 \times 10^{-6}$ . These results fall within the acceptable NCP risk management range of  $10^{-6}$  to  $10^{-4}$ , which supports radiological free release. The modeling parameters and results were presented in Attachment 3 to the Technical Memorandum (Appendix U).

#### 4.3.4 Building 140 Regulatory Concurrence

The Draft Technical Memorandum was submitted to the regulatory agencies for review. Comments to the Building 140 Technical Memorandum were provided by the EPA and DTSC in June 2011 and responses were prepared. The Final Technical Memorandum (Appendix U) incorporated the responses to comments submitted by the EPA and DTSC and was published on July 20, 2011. The DTSC and CDPH subsequently concurred with the radiological release for unrestricted use of Building 140 (Appendix R). According to previous statements by the EPA, their decision for radiological free release of the Parcel B buildings/structure and former building sites will be based on the data and analyses presented in this Radiological RACR.

**From:** Janice Montelongo-Acosta [<mailto:janice.pma@gmail.com>]

**Sent:** Thursday, January 28, 2016 5:17 PM

**To:** Bacey, Juanita@DTSC

**Subject:** Questions about Final Amended Parcel B Record of Decision for Hunters Point

Greetings, I hope this email finds you well.

I am a local Bay Area community member with an inquiry concerning the radiological risk and dose calculations presented on the amended ROD for Parcel B of Hunters Point. I will be using table 7-3 on page 105 of the document as a specific reference.

The issue is that there is no clear methodology of how the risk numbers on the table were obtained. Essentially, the calculations for radiological risk do not, on the surface, make sense. Let's say one were to use the numbers pushed forward by the National Academy of Sciences to calculate radiological risk ( $1.16 \times 10^{-3}$  risk/rem). For the total lifetime radiological risk for building 140, for example, the calculation would be  $4.4 \times 10^{-4}$  risk, which is hundreds of times bigger than the  $1.44 \times 10^{-6}$  shown on the chart. This trend follows up with other impacted buildings.

The table notes include no additional information about how the numbers were calculated. Will it be possible for you to direct me to that information, or perhaps even direct me to someone who will be able to explain these calculations? It would be much appreciated.

Thank you for your time and consideration. I look forward to your reply.

**TABLE 7-3: RADIOLOGICAL RISK RESULTS**  
Parcel 6 Amended Record of Decision, Hunters Point Shipyard, San Francisco, California

RESRAD-BUILD Results		
Impacted Building	Radiological Risk <sup>a,b</sup>	Dose (millirem/year)
Building 103	$1.48 \times 10^{-6}$	7.02
Building 113	$1.48 \times 10^{-6}$	7.02
Building 113A	$1.60 \times 10^{-6}$	1.46
Building 130	$1.60 \times 10^{-6}$	1.46
Building 140	$1.44 \times 10^{-6}$	5.43
Building 146	$1.16 \times 10^{-6}$	1.28

Notes:

- <sup>a</sup> Total risk and dose is equivalent to incremental risk and dose. Actual calculated dose and risk will be based on field measurements from the final status survey results. Incremental risk does not include risk from chemicals present at or below ambient levels; total risk includes risk from all chemical concentrations.
- <sup>b</sup> Total excess lifetime cancer risk.

--  
Janice

Lily Lee  
Cleanup Project Manager  
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**From:** Bradley Angel [mailto:bradley@greenaction.org]  
**Sent:** Thursday, March 17, 2016 9:39 AM  
**To:** LEE, LILY <LEE.LILY@EPA.GOV>; Daniel O Hirsch <dohirsch@ucsc.edu>  
**Subject:** Re: Hunters Point technical meeting with Navy, DTSC, & EPA - timing & proposed agenda

Hi Lily,  
The proposed days and times work for us, so hopefully the UCSC folks can do one of those.  
Also in your email you mention that the Navy offered to respond sooner in writing to specific questions, but they have had these questions...see below.

Bradley

On 3/17/2016 9:32 AM, LEE, LILY wrote:

Dear Bradley,

I'm glad I got to talk with you yesterday at the EJ Task Force meeting. As you requested, out of the 13 times I put in the survey, the Navy, DTSC, and EPA are available April 12 at 10 am or 11 am and April 13 at 9:30 am for a one-hour meeting or call. Below is a screenshot showing responses thus far to the 13 proposed times. Here's the link to the electronic version of the poll:  
<http://doodle.com/poll/3zvvyh3wg8s3g276>. Since no one single time slot is good for all poll respondents, I can propose more alternative times if you like.

In addition, Derek Robinson (Navy) offered to respond sooner in writing to any specific questions that you would like to send in writing. EPA can do that as well. Derek also proposed a draft agenda below based on the general topics that Dan Hirsch provided below. From Derek Robinson (Navy):

“From Mr. Hirsch's email, below is a suggested agenda that I am hoping you can send out for EPA and Greenaction's comment/concurrence. We need to pin this down so that my folks can set aside the time and prepare for topics. Until the agenda is set, a date has been selected, and my folks have responded back, I can only commit to endeavoring to get everyone to the meeting.

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6. Document availability - 5 min”

Please let me know how you would like to proceed.

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	Tue 22	Wed 23	Thu 24	Fri 25	Sat 26	Sun 27	Mon 28
Nina DTSC	✓	✓	✓	✓	✓	✓	✓
Jackie Lane	✓	✓	✓	✓	✓	✓	✓
Bradley Angel	✓	✓	✓	✓	✓	✓	✓
Daniel Hirsch	?	?	?	?	?	?	?
Rob Terry EPA	✓	✓	✓	✓	✓	✓	✓
Maria (UCSC)	✓	✓	✓	✓	✓	✓	✓
Lucien (UCSC)	✓	✓	✓	✓	✓	✓	✓
Janie	✓	✓	✓	✓	✓	✓	✓
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Your name	□	□	□	□	□	□	□

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**LEE, LILY**

---

**From:** LEE, LILY  
**Sent:** Friday, March 18, 2016 11:13 AM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO;Bacey, Juanita@DTSC  
**Cc:** zachary.edwards@navy.mil  
**Subject:** Prefer 4/12 or 4/13? FW: Hunters Point technical meeting with Navy, DTSC, & EPA - timing & proposed agenda

Dear Derek & Nina,

Bradley has agreed to the 3 times that you have said will work for the Navy & DTSC on 4/12 at 10 am or 11 am and on 4/13 at 9:30 am. (I have an 11 am mtg 4/13 at Paul Hastings, but it might get cancelled. If so, I can be available later too.)

Derek, you had said at the BCT mtg that 4/12 at 10 am is a very good time. You also said on 4/13, since he'll be in town anyway for the community mtg, you could come in person.

Do you have a preference among the 3 times?

Lily

Lily Lee  
Cleanup Project Manager  
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Participants	10:00 AM	10:00 AM	11:00 AM	1:00 PM	1:00 PM	10:00 AM	10:00 AM	11:00 AM	1:00 PM	1:00 PM	10:00 AM
Nina DTSC	✓	✓	✓		✓	✓	✓	✓			
Jackie Lane		✓	✓	✓	✓	✓				✓	
Bradley Angel	✓	✓	✓		✓	✓					
Daniel Hirsch	?	?	?	?	?	?	?	?	?	?	?
Rob Terry EPA	✓					✓	✓	✓	✓	✓	
Maria (UCSC)	✓	✓			✓	✓	✓			✓	
Lucien (UCSC)	✓	✓	✓	✓	✓				✓	✓	
Janie							✓			✓	
Navy											
Your name											
	5	5	4	2	5	5	4	2	2	5	8

From Dan Hirsch:

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**LEE, LILY**

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**From:** LEE, LILY  
**Sent:** Monday, March 21, 2016 9:07 AM  
**To:** Robinson, Derek J CIV NAVFAC HQ, BRAC PMO;Bacey, Juanita@DTSC;Franklin, William D CIV NAVFAC HQ, BRAC PMO  
**Cc:** zachary.edwards@navy.mil  
**Subject:** More from Dan Hirsch re topic for call/mtg re rad - USEPA's PRG calculator vs other methods

See below more from Dan Hirsch.

We will share with the group at the upcoming meeting that, as you may have seen, during EPA's routine reviews of SUPR's, we use USEPA's PRG calculator to evaluate the residual risks to determine whether or not they are within the EPA risk range. EPA routinely presents those results in our comment letters to the Navy.

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**From:** Daniel Hirsch [mailto:dohirsch@ucsc.edu]  
**Sent:** Sunday, March 20, 2016 7:57 PM  
**To:** LEE, LILY <LEE.LILY@EPA.GOV>  
**Cc:** Walker, Stuart <Walker.Stuart@epa.gov>; Janice Davis <jadadavi@ucsc.edu>; Lucien Martin <lumamart@ucsc.edu>; Maria Caine <mcaine@ucsc.edu>; Janie Flores <jalflore@ucsc.edu>; Liora Huebner <lhuebner@ucsc.edu>; Flora Lu <floralu@ucsc.edu>; bradley@greenaction.org  
**Subject:** request re conference call April 12

Hi Lily,

We would appreciate it if you would arrange for Stuart Walker, the EPA Superfund remedial program's National Radiation Expert, to participate in the conference call on Hunters Point issues scheduled for April 12.

We note that "Radiation Risk Assessment at CERCLA Sites Q&A ," (EPA Office of Superfund Remediation and Technology Innovation Directive 9200.4-40, May 2014) states:

**"Q10. For CERCLA risk assessments at remedial sites, is it appropriate to use guidance or approaches developed by other Federal, State or Tribal Agencies or by International or National Organizations?"**

A. EPA has made the policy decision that risks from radionuclide exposures at remedial sites should be estimated in the same manner as chemical contaminants, which is consistent with EPA's remedial program implementing guidance (e.g., EPA 1997g, 1999d, 2000f). Consequently, approaches that do not follow the remedial program's policies and guidance should not be used at CERCLA remedial sites. Should regional staff



have questions, they should consult with the Superfund remedial program's National Radiation Expert (Stuart Walker of OSRTI at the time this fact sheet was issued, at (703) 603-8748 or [walker.stuart@epa.gov](mailto:walker.stuart@epa.gov)), before using guidance from other organizations that is not already incorporated into this and other EPA Superfund remedial program guidance."

Among the issues we wish to explore during the conference call is whether remediation standards, models, and other guidance were used at Hunters Point that are inconsistent with the EPA remedial program's policies and guidance. If so, we would like to understand whether EPA Region IX consulted with Mr. Walker before allowing use of guidance that is not incorporated in EPA Superfund remedial program guidance, and if so, on what basis the approvals were made. If there was no consultation with Mr. Walker, we would like to learn why not.

Thank you.

Daniel Hirsch  
Director  
Program on Environmental and Nuclear Policy  
College Ten  
University of California at Santa Cruz